

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for growing carbon nanotubes on a substrate by a hot-filament assisted chemical vapor deposition method, comprising the step of previously depositing on the substrate a titanium and cobalt bilayer such that:

the thickness of the titanium layer ranges between 0.5 and 5 nm;

the thickness of the cobalt layer ranges between 0.25 and 10 nm; and

the thickness of the cobalt layer ranges between half and twice the thickness of the titanium layer.

2. (Original) The method of claim 1, wherein the titanium layer is formed on the cobalt layer.

3. (Previously Presented) The method of claim 1, wherein the substrate is made of silicon coated with oxide.

4. (Previously Presented) The method of claim 1, wherein the substrate comprises at least one tip, whereby a nanotube grows by moving away from the substrate from the top of the tip and other nanotubes grow by spreading against the substrate.

5. (Original) The method of claim 1, comprising the step of selecting the sum of the titanium and cobalt thicknesses according to the diameter and to the structure wanted for the nanotubes.

6. (Currently Amended) The method of claim 1, wherein the bilayer is of cobalt/titanium type and is formed on a ~~thick~~ titanium layer thicker than 10 nm.

7. (Previously Presented) The method of claim 1, wherein the bilayer is of titanium/cobalt type and is coated with a titanium layer of a thickness greater than 20 nm, whereby the nanotubes only grow from the lateral surface of the bilayer.

8. (Previously Presented) A substrate supporting carbon nanotubes coated with a titanium and cobalt bilayer such that:

the thickness of the titanium layer ranges between 0.5 and 5 nm;

the thickness of the cobalt layer ranges between 0.25 and 10 nm; and

the thickness of the cobalt layer ranges between half and twice the thickness of the titanium layer.

9. (Previously Presented) The substrate of claim 8, further comprising microtips, whereby a single carbon nanotube or a single bundle of nanotubes grows from the tip of each microtip and the growth of other nanotubes is performed by spreading on the substrate.